

AMENDMENTS TO THE CLAIMS:

Please amend Claims 6, 24, 38, and 41 as follows:

1. (Withdrawn) An apparatus comprising:

(A) a vibration detection device,

(B) a blur correction device that corrects an image blur, based on output of said vibration detection device, and

(C) a limiting device that limits operation of said blur correction device based on output from said vibration detection device, limiting the operation based on: a first limit that is performed in a case where an amplitude of a vibration velocity is equal to or larger than a predetermined amplitude; and a second limit that is performed in a case where an amplitude of a vibration displacement is equal to or larger than a predetermined amplitude, the first limit and the second limit having different limiting characteristics as to a vibration frequency.

2. (Withdrawn) An apparatus according to Claim 1, further comprising an image sensing device that senses an optical subject image and converts the optical subject image into an image signal, wherein

based on the output of said vibration detection device, said blur correction device corrects blurring of the subject image appearing between the image signals sensed by the image sensing device at different times, by processing these image signals.

3. (Withdrawn) An apparatus according to Claim 1, wherein the second limit is not performed on a vibration having a predetermined frequency, but the first limit is performed on the vibration having the predetermined frequency.

4. (Withdrawn) An apparatus according to Claim 3, wherein the vibration having the predetermined frequency is a vibration equal to or larger than a predetermined frequency.

5. (Withdrawn) An apparatus according to Claim 4, wherein the apparatus includes an image sensing apparatus.

6. (Currently Amended) An apparatus comprising:

(A) a vibration detection device that includes an angular velocity sensor for detecting an angular velocity in vibration of said apparatus;

(B) a blur correction device that corrects an image blur, based on output of said vibration detection device; and

(C) a limiting device that in a case where an output of said vibration detection device, ~~which relates to an amplitude of the vibration before an integral processing,~~ is equal to or larger than a first predetermined amplitude value and is smaller than a second predetermined amplitude value, ~~limits a signal in accordance with the output by using a first limit, and limitation manner in which a first predetermined attenuation ratio is multiplied onto the output, so as to make the output continuously leading to an output of the first predetermined amplitude value,~~ limits a signal in accordance with the output by using a first limit, and limitation manner in which a first predetermined attenuation ratio is multiplied onto the output, so as to make the output continuously leading to an output of the first predetermined amplitude value, and in a case where the output is equal to or larger than the second predetermined amplitude

value, selects one of (a) limits limiting the signal in accordance with the output by using a second limit limitation manner in which a second predetermined attenuation ratio which provides an attenuation action larger than that provided by the first predetermined attenuation ratio is multiplied onto the output and (b) setting the output into a constant amplitude value, so as to make the output continuously leading to an output of the second predetermined amplitude value.

7. (Original) An apparatus according to Claim 6, further comprising an image sensing device that senses the optical subject image and converts the optical subject image into an image signal, wherein

based on the output from said vibration detection device, said blur correction device corrects blurring of the subject image appearing between the image signals sensed by the image sensing device at different times, by processing these image signals.

8-11. (Cancelled)

12. (Original) An apparatus according to Claim 6, wherein said apparatus includes an image sensing apparatus.

13. (Withdrawn) An apparatus comprising:

(A) a vibration detection device,

(B) a blur correction device that corrects an image blur, based on output of said vibration detection device,

(C) a limiting device that limits operation of said blur correction device in accordance with size and frequency of the vibration detected by said vibration detection device.

14. (Withdrawn) An apparatus according to Claim 13, comprising an image sensing device that senses the optical subject image and converts the optical subject image into an image signal, wherein

based on the output from said vibration detection device, said blur correction device corrects the blurring of the subject image appearing between the image signals sensed by the image sensing device at different times, by processing these image signals.

15. (Withdrawn) An apparatus according to Claim 13, wherein said limiting device performs the limit in response to increasing of the vibration detected by said vibration detection device.

16. (Withdrawn) An apparatus according to Claim 15, wherein said limiting device performs the limit in response to increasing of a frequency of the vibration detected by said vibration detection device.

17. (Withdrawn) An apparatus according to Claim 13, wherein said limiting device performs the limit in response to increasing of a frequency of the vibration detected by said vibration detection device becoming great.

18. (Withdrawn) An apparatus according to Claim 13, wherein said apparatus includes an image sensing apparatus.

19. (Withdrawn) An apparatus adapted to a blur correction device to correct an image blur based on an output of a vibration detection device, the apparatus comprising:

a limiting device that limits operation of said blur correction device based on output from the vibration detection device, limiting the operation based on: a first limit that is performed in a case where an amplitude of a vibration velocity is equal to or larger than a predetermined amplitude; and a second limit in a case where an amplitude of a vibration displacement is equal to or larger than a predetermined amplitude, the first limit and the second limit having different limiting characteristics as to a vibration frequency.

20. (Withdrawn) An apparatus according to Claim 19, further comprising an image sensing device that senses an optical subject image and converts the optical subject image into an image signal, wherein

based on the output of said vibration detection device, said blur correction device corrects blurring of the subject image appearing between the image signals sensed by the image sensing device at different times, by processing these image signals.

21. (Withdrawn) An apparatus according to Claim 19, wherein the second limit is not performed on a vibration having a predetermined frequency, but the first limit is performed on the vibration having the predetermined frequency.

22. (Withdrawn) An apparatus according to Claim 19, wherein the vibration having the predetermined frequency is a vibration equal to or larger than a predetermined frequency.

23. (Withdrawn) An apparatus according to Claim 19, wherein the apparatus includes an image sensing apparatus.

24. (Currently Amended) An apparatus adapted to a blur correction device to correct an image blur based on an output of a vibration detection device, wherein said vibration detection device includes an angular velocity sensor for detecting an angular velocity in vibration of said apparatus, the apparatus comprising:

a limiting device that in a case where an output of said vibration detection device; ~~which relates to an amplitude of the vibration before an integral processing,~~ is equal to or larger than a first predetermined amplitude value and is smaller than a second predetermined amplitude value, limits ~~a signal in accordance with the output by using a first limit, and~~ limitation manner in which a first predetermined attenuation ratio is multiplied onto the output, so as to make the output continuously leading to an output of the first predetermined amplitude value, and in a case where the output is equal to or larger than the second predetermined amplitude value, limits selects one of (a) limiting the signal in accordance with the output by a second limit manner in which a second predetermined attenuation ratio which provides an attenuation action larger than that provided by the first predetermined attenuation ratio is multiplied onto the output

and (b) setting the output into a constant amplitude value, so as to make the output continuously leading to an output of the second predetermined amplitude value.

25. (Original) An apparatus according to Claim 24, further comprising an image sensing device that senses an optical subject image and converts the optical subject image into an image signal, wherein

based on the output of said vibration detection device, said blur correction device corrects blurring of the subject image appearing between the image signals sensed by the image sensing device at different times, by processing these image signals.

26-29. (Cancelled)

30. (Original) An apparatus according to Claim 24, wherein said apparatus includes an image sensing apparatus.

31. (Withdrawn) An apparatus adapted to a blur correction device to correct an image blur based on an output of a vibration detection device, the apparatus comprising:

a limiting device that limits operation of said blur correction device in accordance with size and frequency of the vibration detected by said vibration detection device.

32. (Withdrawn) An apparatus according to Claim 31, further comprising an image sensing device that senses an optical subject image and converts the optical subject image into an image signal, wherein

based on the output of said vibration detection device, said blur correction device corrects blurring of the subject image appearing between the image signals sensed by the image sensing device at different times, by processing these image signals.

33. (Withdrawn) An apparatus according to Claim 31, wherein said limiting device performs the limit in response to increasing of the vibration detected by said vibration detection device.

34. (Withdrawn) An apparatus according to Claim 33, wherein said limiting device performs the limit in response to increasing of a frequency of the vibration detected by said vibration detection device.

35. (Withdrawn) An apparatus according to Claim 31, wherein the limiting device performs the limit in response to the frequency of the vibration detected by the vibration detection device becoming great.

36. (Withdrawn) An apparatus according to Claim 31, wherein said apparatus includes an image sensing apparatus.



37. (Withdrawn) A control method adapted to a blur correction device to correcting an image blur based on an output of a vibration detection device, the method comprising:

limiting operation of said blur correction device based on output from the vibration detection device, limiting the operation based on: a first limit that is performed in a case where an amplitude of a vibration velocity is equal to or larger than a predetermined amplitude; and by using a second limit that is performed in a case where an amplitude of a vibration displacement is equal to or larger than a predetermined amplitude, the first limit and the second limit having different limiting characteristics as to a vibration frequency.

38. (Currently Amended) A control method adapted to a blur correction device to correct an image blur based on an output of a vibration detection device, wherein the vibration detection device includes an angular velocity sensor for detecting an angular velocity in vibration of an apparatus, the method comprising:

in a case where an output of the vibration detection device, ~~which relates to an amplitude of the vibration before an integral processing,~~ is equal to or larger than a first predetermined amplitude value and is smaller than a second predetermined amplitude value, limiting ~~a signal in accordance with the output by using a first limit, and limitation manner in which a first predetermined attenuation ratio is multiplied onto the output, so as to make the output continuously leading to an output of the first predetermined amplitude value,~~ and in a case where the output is equal to or larger than the second predetermined amplitude value, ~~limiting selecting one of (a) limiting the signal in accordance with the output by using a second limit~~

limitation manner in which a second predetermined attenuation ratio which provides an attenuation action larger than that provided by the first predetermined attenuation ratio is multiplied onto the output and (b) setting the output into a constant amplitude value, so as to make the output continuously leading to an output of the second predetermined amplitude value.

39. (Withdrawn) A control method adapted to a blur correction device to correct an image blur based on an output of a vibration detection device, the method comprising:

limiting operation of said blur correction device in accordance with the size and frequency of the vibration detected by said vibration detection device.

40. (Withdrawn) A computer program product adapted to a blur correction device to correct an image blur based on an output of a vibration detection device, the content of the computer program product comprising:

limiting operation of said blur correction device based on output from the vibration detection device, limiting the operation based on: a first limit that is performed in a case where an amplitude of a vibration velocity is equal to or larger than a predetermined amplitude; and a second limit that is performed in a case where an amplitude of a vibration displacement is equal to or larger than a predetermined amplitude, the first limit and the second limit having different limiting characteristics as to a vibration frequency.

41. (Currently Amended) A computer program product adapted to a blur correction device to correct an image blur based on an output of a vibration detection device,

wherein the vibration detection device includes an angular velocity sensor for detecting an angular velocity in vibration of an apparatus, the computer program product effecting a method comprising:

in a case where an output of the vibration detection device, ~~which relates to an amplitude of the vibration before an integral processing,~~ is equal to or larger than a first predetermined amplitude value and is smaller than a second predetermined amplitude value, limiting ~~a signal in accordance with the output by using a first limit, and~~ limitation manner in which a first predetermined attenuation ratio is multiplied onto the output, so as to make the output continuously leading to an output of the first predetermined amplitude value, and in a case where the output is equal to or larger than the second predetermined amplitude value, selecting one of (a) limiting the signal in accordance with the output by a second limit limitation manner in which a second predetermined attenuation ratio which provides an attenuation action larger than that provided by the first predetermined attenuation ratio is multiplied onto the output and (b) setting the output into a constant amplitude value, so as to make the output continuously leading to an output of the second predetermined amplitude value.

42. (Withdrawn) A computer program product adapted to a blur correction device to correct a vibration in an image based on an output of a vibration detection device, the computer program product comprising:

limiting operation of said blur correction device in accordance with the size and frequency of the vibration detected by said vibration detection device.

43. (Previously Presented) An apparatus according to Claim 6, wherein the first predetermined value and the second predetermined value are set in accordance with an image sensing time for sensing an object image.

44. (Previously Presented) An apparatus according to Claim 6, wherein the first predetermined value and the second predetermined value are set in accordance with an output relating to a frequency used in said vibration detection device.

45. (Previously Presented) An apparatus according to Claim 24, wherein the first predetermined value and the second predetermined value are set in accordance with an image sensing time for sensing an object image.

46. (Previously Presented) An apparatus according to Claim 24, wherein the first predetermined value and the second predetermined value are set in accordance with an output relating to a frequency used in said vibration detection device.

47. (Previously Presented) A method according to Claim 38, wherein the first predetermined value and the second predetermined value are set in accordance with an image sensing time for sensing an object image.

48. (Previously Presented) A method according to Claim 38, wherein the first predetermined value and the second predetermined value are set in accordance with an output relating to a frequency used in the vibration detection device.

49. (Previously Presented) A computer program product according to Claim 41, wherein the first predetermined value and the second predetermined value are set in accordance with an image sensing time for sensing an object image.

50. (Previously Presented) A computer program product according to Claim 41, wherein the first predetermined value and the second predetermined value are set in accordance with an output relating to a frequency used in the vibration detection device.